AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-3 (canceled).

4 (original). A method for amplifying HHV6 DNA which method involves the use of a pair of oligonucleotide primers comprising the sequences

5'CTTCTGTTTTAAGTCGTACAGGAGT and

5'ACAAGTTGCCATTTCGGGGAAGTAC, or a pair of functionally equivalent sequences.

5 (original). A method as claimed in claim 4 in which each primer is less than about 50 nucleotides in length.

6 (original). A method as claimed in claim 5 in which each primer is less than about 35 nticleotides in length.

7 (original). A method as claimed in claim 5 in which the primers consist of the sequences 5'CTTCTGTTTTAAGTCGTACAGGAGT and 5'ACAAGTTGCCATTTTCGGGGGAAGTAC, or functionally equivalent sequences.

8 (original). A method for detecting HHV6 in a sample suspected of containing HHV6, the method comprising the steps of:

(a) optionally amplifying viral DNA present in the *sample* by polymerase chain

reaction techniques using outer primers complementary to the viral DNA.

(b) adding to the sample, or to the sample having undergone optional amplification step (a), a pair of inner oligonucleotide primers complementary to and specific for HHV6 DNA, wherein the inner primers comprise the sequences 5'AAGCTTGCACAATGCCAAAAAACAG and 5'CTCGAGTATGCCGAGACCCCTAATC, or functionally equivalent sequences;

(c) carrying out polymerase chain reaction techniques on the sample so as to amplify the HHV6 DNA spanned by the inner primers present in the sample ; and

(d) detecting the amplified HHV6 DNA.

9 (original). A method for detecting HHV6 in a sample suspected of containing HHV6, the method comprising the steps of:

(a) optionally amplifying viral DNA present in the sample by polymerase chain reaction techniques by

(i) adding outer primers complementary to the viral DNA in the sample,

(ii) providing buffers, reagents, nucleotides and a thermostable DNA polymerase to the sample to form a reaction mixture,

(iii) heating the reaction mixture to a temperature such that double stranded viral DNA present denatures to form single stranded DNA molecules,

(iv) cooling the reaction mixture to a temperature such that the outer primers anneal to their respective complementary sequences on the denatured single stranded DNA molecules,

(v) heating the reaction mixture to a temperature such that the DNA polymerase

extends the primers to form new double stranded DNA molecules spanning the region of DNA defined by the outer primers, and

(vi) repeating steps (iii), (iv) and (v) such that the number of copies of the region of DNA encoding the double stranded viral DNA is amplified;

(b) adding to the optionally amplified sample a pair of inner oligonucleotide primers complementary to and specific for HHV6 DNA,

wherein the inner primers comprise the sequences

5'AAGCTTGCACAATGCCAAAAAACAG and

5'CTCGAGTATGCCGAGACCCCTAATC, or functionally equivalent sequences;

(c) heating the reaction mixture to a temperature such that the optionally amplified double stranded viral DNA denatures to form single stranded DNA molecules;

(d) cooling the reaction mixture to a temperature such that the inner primers anneal to their respective complementary sequences on the denatured DNA;

(e) heating the reaction mixture to a temperature such that the DNA polymerase extends the primers to form new double stranded DNA molecules spanning the region of DNA defined by the inner primers;

(f)repeating steps (c), (d) and (e) such that the number of copies of the region of DNA is amplified; and

(g) detecting the amplified DNA.

10 (currently amended). A method as claimed in claim 8 ~~or claim 9~~ in which the sample is serum or urine.

11 (currently amended). A method for detecting or diagnosing HHV6 infection in a subject, the method comprising conducting a method as claimed in claim 8 ~~or claim 9~~ on a sample from the subject to detect the presence of HHV6 in the sample.